## ATTORNEY DOCKET NO. 10031298-

AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration Q. Box 7599 Roseland, Colorado 80537-0599

OCT 1 9 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Jefferson B. Burch et al.

10/698,292

Examiner: J. D. Ewart

Filing Date: October 31, 2003

**Group Art Unit: 2617** 

Title: BANDWIDTH MANAGEMENT IN A WIRELESS MEASUREMENT SYSTEM USING

STATISTICAL PROCESSING OF MEASUREMENT DATA

**COMMISSIONER FOR PATENTS** P.O. Box 1450 Alexandria VA 22313-1450

one month

#### TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on August 30, 2006

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply. (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)(1)-(5)) for the total number of months checked below: \$ 120.00

_		¥ /				
	two months	\$ 450.00				
	three months	\$1020.00				
	four months	\$1590.00				
☐ The extension fee has already been filled in this application.						

(b) Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

application, please charge any fees required or credit any overpayment to Deposit Account 50-1078 pursuant to 37 CFR 1.25.

A duplicate copy of this transmittal letter is enclosed.

×	I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV568242423US, in an envelope addressed to: MS Appeal Brief-
	Patents, Commissioner for Patents, P O Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: October 19, 2006

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Date of Facsimile:

Typed Name: Joy

Signature:

Respectfully submitted,

By

Jefferson B. Burch

Thomas J. Means

Attorney/Agent Cor Applicant(s)

Reg. No. 41,990

Date: October 19, 2006

Telephone No. 214-855-8230



Docket No.: 10031298-1

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Jefferson B. Burch et al.

Application No.: 10/698,292

. 10/090,292

Filed: October 31, 2003

For: BANDWIDTH MANAGEMENT IN A

WIRELESS MEASUREMENT SYSTEM USING STATISTICAL PROCESSING OF

**MEASUREMENT DATA** 

Confirmation No.: 1408

Art Unit: 2617

Examiner: J. D. Ewart

### APPEAL BRIEF

MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Dear Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on August 30, 2006, and is in furtherance of said Notice of Appeal. The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF. This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1205:

I.	Real Party in Interest	page 2
II.	Related Appeals and Interferences	
III.	Status of Claims	page 4
IV.	Status of Amendments	page 5
V.	Summary of Claimed Subject Matter	page 6
VI.	Grounds of Rejection to be Reviewed on Appeal	page 8
VII.	Argument	page 9
VIII.	Claims Appendix	
IX.	Evidence Appendix	page 25
X.	Related Proceedings Appendix	page 26

10/23/2006 DEMMANU1 00000085 501078 10698292

01 FC:1402

500.00 DA

8: 50

Application No.: 10/698,292 Docket No.: 10031298-1

## I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Agilent Technologies, Inc.

## II. RELATED APPEALS AND INTERFERENCES

in

-,5

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

Application No.: 10/698,292 Docket No.: 10031298-1

#### III. STATUS OF CLAIMS

## A. Total Number of Claims in Application

There are 46 claims pending in application.

#### B. Current Status of Claims

- 1. Claims canceled: None
- 2. Claims withdrawn from consideration but not canceled: None
- 3. Claims pending: 1-46
- 4. Claims allowed: None
- 5. Claims rejected: 1-3, 5-13, 17-21, 23-28, 30-36, 40-42, and 44-46
- 6. Claims objected to: 4, 14-16, 22, 29, 37-39, and 43

## C. Claims On Appeal

The claims on appeal are claims 1-3, 5-13, 17-21, 23-28, 30-36, 40-42, and 44-46

#### IV. STATUS OF AMENDMENTS

٠.٢

. 5%

A Final Office Action (hereinafter *Final Office Action*) rejecting the claims of the present application was mailed on July 21, 2006. In response, Appellant did not file an Amendment After Final Rejection, but instead filed a Notice of Appeal, which this brief supports. Accordingly, the claims on appeal are those as rejected in the *Final Office Action*. A listing of the claims on appeal is provided in the "Claims Appendix" section of this brief.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in the independent claims involved in this appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37. Each element of the claim is identified by a corresponding reference to the specification and drawings where applicable. However, the citation to passages in the specification and drawings does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

According to one claimed embodiment, such as that of independent claim 1, a method for managing bandwidth in a wireless probe measurement system (e.g., paragraph [0023]; figure 4) comprises receiving an indicator at the wireless probe to begin taking measurements of one or more variables (e.g., paragraph [0005]; figure 1, item 104; figure 4, item 400), measuring the one or more variables (e.g., paragraph [0023]; figure 4, item 401), calculating a set of statistical values at the wireless probe using the measured one or more variables (e.g., paragraph [0023]; figure 4, item 403), and transmitting the set of statistical values to a central station (e.g., paragraph [0023]; figure 4, item 404).

According to another claimed embodiment, such as that of independent claim 17, a wireless probe for measuring desired phenomena comprises a processor (e.g., paragraph [0015]; figure 1, item 104), a transducer for capturing measurements (e.g., paragraph [0015]; figure 1, item 104), code operable by the processor for calculating statistical information on the captured measurements(e.g., paragraph [0015]), and a communication interface for transmitting the statistical information to a data clearinghouse (e.g., paragraph [0015]).

According to yet another claimed embodiment, such as that of independent claim 25, a method for measuring desired phenomena using a wireless probe comprises measuring one or more variables related to the desired phenomena (e.g., paragraph [0029]; figure 6, step 600), calculating statistical data at the wireless probe using the measured one or more variables responsive to receiving a transition event notification (e.g., paragraph [0030]; figure

6

6, step 605), and transmitting the statistical data to a central processing location (e.g., paragraph [0030]; figure 1, step 610).

....

4.1

According to still another claimed embodiment, such as that of independent claim 40, a method for analyzing desired phenomena in a defined area using a plurality of wireless probes comprises dividing the defined area into a grid having a plurality of grid sections (e.g., paragraph [0020]; figure 3, item 300), taking raw measurements related to the desired phenomena across the defined area (e.g., paragraph [0020]), determining a location of each of the raw measurements (e.g., paragraph [0020]), assigning each of the raw measurements to one of the plurality of grid sections responsive to the location falling within a perimeter of the one of the plurality of grid sections (e.g., paragraph [0020]), calculating statistical data at the wireless probe using the raw measurements (e.g., paragraph [0030]; figure 6, step 605), and communicating the statistical data to a central analysis center (e.g., paragraph [0030]; figure 1, step 610).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-3, 5-7, 9, 10, 12, 17-20, 23-28, 30, 31, and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 20040176040 to Thornton et al. (hereinafter *Thornton*) in view of U.S. Patent No. 6,580,983 to Laguer-Diaz et al. (hereinafter *Laguer-Diaz*);

- B. Claims 8, 21, and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of U.S. Patent No. 6,401,054 to Andersen (hereinafter *Andersen*);
- C. Claims 11 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of U.S. Patent No. 5,805,200 to Counselman III (hereinafter *Counselman*);
- D. Claims 13, 35, 36, 40-42, 45, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of U.S. Patent No. 5,987,306 to Nielsen et al. (hereinafter *Nielsen*); and
- E. Claim 44 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton, Laguer-Diaz*, and *Nielsen*, and further in view of *Andersen*.

8

#### VII. ARGUMENT

٠,١

.....

Appellant respectfully traverses the outstanding rejections of the pending claims, and requests that the Board reverse these rejections in light of the remarks contained herein. The claims do not stand or fall together, and Appellant presents separate arguments for several claims. Each of the separately argued claims are presented with separate headings and subheading in accordance with 37 C.F.R. § 41.37(c)(1)(vii).

# A. Claim Rejections Under 35 U.S.C. § 103(a) Over *Thornton* in view of *Laguer-Diaz*

Claims 1-3, 5-7, 9, 10, 12, 17-20, 23-28, 30, 31, and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz*. Appellant respectfully traverses.

To establish a prima facie case of obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the applied reference. See In re Vaeck 947 F.2d 488 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck and Co., Inc., 800 F.2d 1091 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981 (C.C.P.A. 1974). Without conceding the second criteria, Appellant asserts that the Examiner's rejection does not satisfy the first and third criteria.

#### 1. Improper Motivation

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983). In this case, the combination of *Laguer-Diaz* with *Thornton* is improper because *Thornton* expressly teaches away from any combination with *Laguer-Diaz*. Specifically, *Laguer-Diaz* discloses a system for transmitting data from a vehicle during operation of the vehicle—*i.e.*, drive testing. *See Laguer-Diaz*, Abstract. Meanwhile, *Thornton* states that:

•.\*•

·. }

[t]he traditional approach to identifying locations with poor network RF coverage is to perform drive testing . . . . [Drive testing] is expensive, slow, and very labor-intensive . . . .

Thornton, paragraph [0002] (emphasis added). Therefore, Thornton expressly criticizes, discredits, and discourages testing from aboard a moving vehicle. Appellant respectfully asserts that the very purpose of Thornton's invention is to provide an alternative to drive testing methods disclosed in Laguer-Diaz. In fact, Thornton summarizes its invention by stating that:

[t]he received information is a collection of the wireless device performance history and does not require costly, time-consuming drive testing or customer involvement....

Thornton, paragraph [0008] (emphasis added). Therefore, Thornton teaches away from a combination with Laguer-Diaz, and the combination of Thornton with Laguer-Diaz is improper. In response to the foregoing remarks, the Examiner has stated that:

[t]he Examiner is only using the *Laguer-Diaz* reference to show a teaching of sending statistical data rather than sending all the raw data . . . .

Final Office Action, page 2. However, Appellant respectfully points out that each prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. See W.L. Gore & Associates, Inc., v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Here, when each reference is taken as a whole, it is clear that Laguer-Diaz discloses a method of drive testing while Thornton teaches away from drive testing and provides alternatives therefor. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 1-3, 5-7, 9, 10, 12, 17-20, 23-28, 30, 31, and 33.

#### 2. Lack of All Claimed Limitations

a. Claims 1–3, 5–7, 9, 10, and 12

Claim 1 recites, in part, "receiving an indicator at said wireless probe to begin taking measurements of one or more variables . . . ." The Examiner argues that *Thornton*'s "scheduled cell measurement" meets the claimed limitation because it "provide[s] an

٠.٠٠.

• . 1

4. However, *Thornton*'s scheduled cell measurement is performed by elements that exist and operate entirely within *Thornton*'s probe itself. *Thornton*, paragraphs [0036]-[0038], Figure 4. Accordingly, any "indicator" that may be disclosed by *Thornton* is not be *received at the probe*, but rather it is *generated by the probe*. Appellant has been unable to find any portion of *Laguer-Diaz* that teaches or suggests the claimed limitation, and the Examiner has not shown otherwise. Therefore, the combination of *Thornton* with *Laguer-Diaz*, even if proper, does not teach or suggest every limitation of claim 1.

Claims 2–3, 5–7, 9, 10, and 12 each depend directly or indirectly from independent claim 1, thus inheriting each of the limitations of that independent claim. Therefore, claims 2–3, 5–7, 9, 10, and 12 are each patentable over the asserted combination of references. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 1–3, 5–7, 9, 10, and 12.

#### b. Claims 25–28, 30, 31, and 33

Claim 25 recites, in part, "calculating statistical data at said wireless probe using said measured one or more variables, responsive to receiving a transition event notification . . . ." Neither *Thornton* nor *Laguer-Diaz*, taken alone or in combination, teach or suggest the claimed feature. In support for this rejection, the Examiner states that *Laguer-Diaz* discloses calculating and transmitting statistical measures and that:

[s]tatistics are calculated after a sample has been collected and [is] representative of the sample. The process of calculating statistics includes an inherent notification that the sample has been collected, which the Examiner equates with transition event notification.

Final Office Action, page 3. First, Appellant respectfully points out that "a notification that a sample has been collected" does not meet the claimed "transition event notification." Moreover, it is respectfully asserted that the Examiner's theory of inherency has no basis in fact, and does not reasonably support the rejection of record. See Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

٠.٠٠

...

Even if we assume, arguendo, that "a notification that a sample has been collected" indeed meets the claimed transition event notification, the Examiner has not shown that such notification is necessarily present in the prior art. See In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999). First, as the Examiner admits, "a notification that a sample has been collected" is not explicitly disclosed in Laguer-Diaz, which is silent as to when statistical calculations are made. Final Office Action, page 3. Second, a person of ordinary skill in the art would reasonably interpret Laguer-Diaz as teaching that statistical data is calculated at the end of the day immediately before transmission to a remote site, and not upon receipt of a transition event notification. See Laguer-Diaz, col. 8, lns. 39-42. Therefore, the Examiner has not demonstrated that "a notification that a sample has been collected" is necessarily present in Laguer-Diaz, and thus a proper showing of inherency has not been made.

Appellant has not identified any portion of Thornton that teaches or suggests the claimed limitation, and the Examiner has not shown otherwise. Therefore, the combination of Thornton with Laguer-Diaz, even if proper, does not teach or suggest every limitation of claim 25.

Claims 26–28, 30, 31, and 33 each depend directly or indirectly from independent claim 25, thus inheriting each of the limitations of that independent claim. Therefore, claims 26–28, 30, 31, and 33 are each patentable over the asserted combination of references. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 25–28, 30, 31, and 33.

## B. Claim Rejections Under 35 U.S.C. § 103(a) Over Thornton, Laguer-Diaz and Andersen

Claims 8, 21, and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of *Andersen*. Appellant respectfully traverses.

#### 1. Improper Motivation

Appellant has previously asserted that there is no motivation for the combination of *Thornton* with *Laguer-Diaz*. In addition, Appellant further asserts that there is no motivation to combine *Thornton* and *Laguer-Diaz* with *Andersen*. In support for the rejection of claims

8 and 32, the Examiner states that *Andersen* cures certain deficiencies of *Thornton* and *Laguer-Diaz*, and that it would be obvious to combine *Thornton* and *Laguer-Diaz* with *Andersen* "to reduce the amount of data sent to the central monitoring station." *Final Office Action*, page 9. However, a combination of *Thornton* and *Laguer-Diaz*, if proper, would not need to utilize *Andersen*'s teachings in order to reduce the amount of data sent to a central station, at least, because *Laguer-Diaz* already teaches such reduction. *See Laguer-Diaz*, col. 8, lns. 39-42. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990), *cited in* M.P.E.P. § 2143.01. In this case, at least because *Andersen* would be unnecessary to achieve the Examiner's recited goal, the Examiner has effectively indicated that the references can merely be combined. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 8, 21, and 32.

#### 2. Lack of All Claimed Limitations

As asserted above, the combination of *Thornton* and *Laguer-Diaz* fails to teach or suggest all of the features recited by independent claims 1 and 25. The Examiner does not rely upon *Andersen* as teaching or suggesting those features, and Appellant asserts that *Andersen* does not teach or suggest such features. Therefore, the combination of *Thornton*, *Laguer-Diaz* and *Andersen*, even if proper, fails to teach or suggest all of the limitations of independent claims 1 and 25. Dependent claims 8 and 32 depend from claims 1 and 25, respectively, thus inheriting all the limitations of those independent claims. Consequently, the combination of *Thornton*, *Laguer-Diaz* and *Andersen* also fails to teach or suggest all of the limitations of dependent claims 8 and 32. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 8 and 32.

# C. Claim Rejections Under 35 U.S.C. § 103(a) Over *Thornton*, *Laguer-Diaz* and *Counselman*

Claims 11 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of *Counselman*. Appellant respectfully traverses.

#### 1. Improper Motivation

Appellant has previously asserted that there is no motivation for the combination of *Thornton* with *Laguer-Diaz*. In addition, Appellant further asserts that there is no motivation to combine *Thornton* and *Laguer-Diaz* with *Counselman*. In support for this rejection, the Examiner states that *Counselman* cures certain deficiencies of *Thornton* and *Laguer-Diaz*, and that it would be obvious to combine *Thornton* and *Laguer-Diaz* with *Counselman* "to conserve memory space." *Final Office Action*, page 10. However, a combination of *Thornton* and *Laguer-Diaz*, even if proper, does not indicate a need to conserve memory. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990), *cited in* M.P.E.P. § 2143.01. In this case, at least because *Counselman* would be unnecessary to achieve the Examiner's recited goal, the Examiner has effectively indicated that the references can merely be combined.

Moreover, the motivation put forth by the Office Action—i.e., "to conserve memory," is only a general incentive, and not an objective reason to combine the references. Appellant points out that "[a] general incentive does not make obvious a particular result, nor does the existence of techniques by which those efforts can be carried out." *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1995). Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 11 and 34.

#### 2. Lack of All Claimed Limitations

As asserted above, the combination of *Thornton* and *Laguer-Diaz* fails to teach or suggest all of the features recited by independent claims 1 and 25. The Examiner does not rely upon *Counselman* as teaching or suggesting those features, and Appellant asserts that *Counselman* does not teach or suggest such features. Therefore, the combination of *Thornton*, *Laguer-Diaz* and *Counselman*, even if proper, fails to teach or suggest all of the limitations of independent claims 1 and 25. Dependent claims 11 and 34 depend from claims 1 and 25, respectively, thus inheriting all the limitations of those independent claims. Consequently, the combination of *Thornton*, *Laguer-Diaz* and *Counselman* also fails to teach

or suggest all of the limitations of dependent claims 11 and 34. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 11 and 34.

## D. Claim Rejections Under 35 U.S.C. § 103(a) Over Thornton, Laguer-Diaz, and Nielsen

Claims 13, 35, 36, 40-42, 45, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton* in view of *Laguer-Diaz* and in further view of *Nielsen*. Appellant respectfully traverses.

### 1. Improper Motivation

٠.٠٠

٠.،

Appellant has previously asserted that there is no motivation for the combination of *Thornton* with *Laguer-Diaz*. In addition, Appellant further asserts that there is no motivation to combine *Thornton* and *Laguer-Diaz* with *Nielsen*. In support for the rejection of claims 13 and 40, the Examiner states that *Nielsen* cures certain deficiencies of *Thornton* and *Laguer-Diaz*, and that it would be obvious to combine *Thornton* and *Laguer-Diaz* with *Nielsen* "to provide a presentation of test results." *Final Office Action*, pages 11 and 12. However, a combination of *Thornton* and *Laguer-Diaz*, even if proper, does not indicate a need to provide a presentation of test results as allegedly provided by *Nielsen*. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990), *cited in* M.P.E.P. § 2143.01. In this case, the Examiner has effectively indicated that the references can merely be combined. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 13, 35, 36, 40-42, and 44-46.

## 2. <u>Lack of All Claimed Limitations</u>

#### a. Claims 13, 35, and 36

As asserted above, the combination of *Thornton* and *Laguer-Diaz* fails to teach or suggest all of the features recited by independent claims 1 and 25. The Examiner does not rely upon *Nielsen* as teaching or suggesting those features, and Appellant asserts that *Nielsen* does not teach or suggest such features. Therefore, the combination of *Thornton*, *Laguer-Diaz* and *Nielsen*, even if proper, fails to teach or suggest all of the limitations of independent

claims 1 and 25. Dependent claims 13, 35, and 36 depend from claims 1 or 25, thus inheriting all the limitations of those independent claims. Consequently, the combination of *Thornton*, *Laguer-Diaz*, and *Nielsen* also fails to teach or suggest all of the limitations of dependent claims 13, 35, and 36. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 13, 35, and 36.

#### b. Claim 40

Claim 40 recites, in part, "assigning each of said raw measurements to one of said plurality of grid sections responsive to said location falling within a perimeter of said one of said plurality of grid sections [and] calculating statistical data at said wireless probe using said raw measurements . . . ." The Examiner admits that the combination of *Thornton* with *Laguer-Diaz*, even if proper, would not teach or suggest dividing a defined area into a grid, as recited in the claim. Thus, in support for this rejection, the Examiner relies upon *Nielsen* as disclosing the claimed grid in order "to provide a presentation of test results." *Final Office Action*, page 12. Appellant respectfully asserts that *Nielsen*'s presentation of test results is performed at a "presentation station" after raw measurements have been taken by a probe and gathered at the station. Therefore, even if *Nielsen* taught or suggested dividing a defined area into a grid to provide a presentation of test results, a combination of *Thornton* with *Laguer-Diaz* and *Nielsen* would not teach or suggest assigning each of said raw measurements a grid section *and then* calculating statistical data at said wireless probe using the raw measurements, as recited in the claim. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claim 40.

# E. Claim Rejections Under 35 U.S.C. § 103(a) Over *Thornton*, *Laguer-Diaz*, *Nielsen*, and *Andersen*

Claim 44 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Thornton*, *Laguer-Diaz* and *Nielsen* and further in view of *Andersen*. Appellant respectfully traverses.

#### 1. Improper Motivation

Appellant has previously asserted that there is no motivation for the combination of *Thornton* with *Laguer-Diaz* and/or *Nielsen*. In addition, Appellant further asserts that there is

٠.٠٠.

٠. ٢

no motivation to combine *Thornton*, *Laguer-Diaz*, and *Nielsen* with *Andersen*. In support for the rejection of claim 44, the Examiner states that *Andersen* cures certain deficiencies of *Thornton*, *Laguer-Diaz*, and *Nielsen*, and that it would be obvious to combine *Thornton*, *Laguer-Diaz*, and *Nielsen* with *Andersen* "to reduce the amount of data sent to the central monitoring station." *Final Office Action*, page 9. However, a combination of *Thornton* with *Laguer-Diaz*, and *Nielsen*, if proper, would not need to utilize *Andersen*'s teachings in order to reduce the amount of data sent to a central station, at least, because *Laguer-Diaz* already teaches such reduction. *See Laguer-Diaz*, col. 8, lns. 39-42. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990), *cited in* M.P.E.P. § 2143.01. In this case, at least because *Nielsen* would be unnecessary to achieve the Examiner's recited goal, the Examiner has effectively indicated that the references can merely be combined. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claim 44.

#### 2. <u>Lack of All Claimed Limitations</u>

As asserted above, the combination of *Thornton* with *Laguer-Diaz* and *Nielsen* fails to teach or suggest all of the features recited by independent claim 40. The Examiner does not rely upon *Andersen* as teaching or suggesting those features, and Appellant asserts that *Nielsen* does not teach or suggest such features. Therefore, the combination of *Thornton* with *Laguer-Diaz*, *Nielsen* and *Andersen* fails to teach or suggest all of the limitations of independent claim 40. Dependent claim 44 depend from claim 40, thus inheriting all the limitations of that independent claim. Consequently, the combination of *Thornton*, *Laguer-Diaz*, *Nielsen* and *Andersen* also fails to teach or suggest all of the limitations of dependent claim 44. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claim 44.

Appellant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 200300353-1, from which the undersigned is authorized to draw.

Dated: October 19, 2006

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV568242423US, on the date shown below in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated:

October 19, 2006

Signature:

Respectfully submitted,

Thomas J. Meaney

Registration No.: 41,990

Attorney for Appellant

(214) 855-8230

#### VIII. CLAIMS APPENDIX

• . ;

1. A method for managing bandwidth in a wireless probe measurement system comprising:

receiving an indicator at said wireless probe to begin taking measurements of one or more variables;

measuring said one or more variables;

calculating a set of statistical values at said wireless probe using said measured one or more variables; and

transmitting said set of statistical values to a central station.

2. The method of claim 1 further comprising:

marking each measurement of said one or more variables with one or more of:

- a time of said measurement; and
- a location of said measurement.
- 3. The method of claim 1 further comprising: comparing said one or more variables to preset alarm conditions; setting an alarm state in response to finding an exceeded one of said preset alarm conditions.
- 5. The method of claim 3 wherein said transmitting step further comprises: checking for said high priority items prior to transmitting said set of statistical values; transmitting said high priority items before said transmitting of said set of statistical values; and

transmitting low priority items when there are no high priority items and when there are none of said set of statistical values to transmit.

6. The method of claim 1 wherein said indicator comprises one or more of: passage of a predetermined time; passage of a predetermined distance by said wireless probe; and a combination of said passage of said predetermined time and distance.

7. The method of claim 1 wherein said calculating step comprises: calculating a set of statistics using said measured one or more variables.

٠, ٠٠,

...

- 8. The method of claim 1 wherein said calculating step comprises: calculating a set of intermediate statistical values using one or more variables.
- 9. The method of claim 8 wherein said calculating said set of intermediate statistical values uses one or more of:

one or more variables measured by a plurality of wireless probes; and one or more variables measured within a single location by a single one of said plurality of wireless probes.

10. The method of claim 1 further comprising: storing said measured one or more variables in a storage device locally accessible by said wireless probe.

11. The method of claim 10 further comprising:

decimating said measured one or more variables to reduce a size of said measured one or more variables prior to said storing.

- 12. The method of claim 1 further comprising: discarding said measured one or more variables after said calculating step.
- 13. The method of claim 1 wherein said wireless probe measurement system is logically divided into a grid, wherein said wireless probes measures for said phenomena in one or more bins of said grid.
  - 17. A wireless probe for measuring desired phenomena comprising: a processor;

a transducer for capturing measurements;

code operable by said processor, for calculating statistical information on said captured measurements; and

a communication interface for transmitting said statistical information to a data clearinghouse.

18. The wireless probe of claim 17 further comprising:

•. ••.

a clock, wherein each of said captured measurements is stamped with a time of measurement from said clock.

19. The wireless probe of claim 17 further comprising:

a locator device, wherein each of said captured measurements is stamped with a location of measurement from said locator device.

- 20. The wireless probe of claim 17 wherein said code calculates statistical variables using said captured measurements.
- 21. The wireless probe of claim 17 wherein said code calculates intermediate statistical values using said captured measurements, wherein said intermediate statistical values are used by said data clearinghouse to analyze said desired phenomena.
  - 23. The wireless probe of claim 17 further comprising:

a storage interface for communicating said captured measurements to a local storage device

24. The wireless probe of claim 23 further comprising:

dropping select ones of said captured measurements to reduce a size of said captured measurements prior to storing on said local storage device.

25. A method measuring desired phenomena using a wireless probe comprising:

measuring one or more variables related to said desired phenomena;

calculating statistical data at said wireless probe using said measured one or more variables, responsive to receiving a transition event notification; and

transmitting said statistical data to a central processing location.

26. The method of claim 25 further comprising:

stamping each measurement of said one or more variables with one or more of:

- a time of said measurement; and
- a location of said measurement.

27. The method of claim 25 wherein said measuring step is executed according to one or more of:

passing of a predetermined time; passing of a predetermined distance by said wireless probe; and a combination of said passing of said predetermined time and distance.

٠. ٠٠.

. . .

- 28. The method of claim 25 further comprising: comparing said one or more variables to predetermined alarm condition; creating an alarm message in response to finding a violated said predetermined alarm condition.
- 30. The method of claim 28 wherein said transmitting step further comprises: checking for said high priority items prior to transmitting said statistical data; transmitting said high priority items before said transmitting of said statistical data; and

transmitting low priority items when there are no high priority items and when there are none of said statistical data to transmit.

- 31. The method of claim 25 wherein said calculating step comprises: calculating statistical values using said measured one or more variables.
- 32. The method of claim 25 wherein said calculating step comprises: calculating intermediate statistical data using one or more variables.
- 33. The method of claim 25 further comprising: storing said measured one or more variables in a memory device local to said wireless probe.
  - 34. The method of claim 33 further comprising: decimating said measured one or more variables prior to said storing.

35. The method of claim 25 further comprising:

• . :

defining an area over which said wireless probe measures for said desired phenomena; and

overlaying a grid over said area, wherein said area is divided into a plurality of bins.

- 36. The method of claim 35 wherein said wireless probe calculates said statistical data for each of said plurality of bins for which said wireless probe measures said one or more variables related to said desired phenomena.
- 40. A method for analyzing desired phenomena in a defined area using a plurality of wireless probes, said method comprising:

dividing said defined area into a grid having a plurality of grid sections; taking raw measurements related to said desired phenomena across said defined area; determining a location of each of said raw measurements;

assigning each of said raw measurements to one of said plurality of grid sections responsive to said location falling within a perimeter of said one of said plurality of grid sections;

calculating statistical data at said wireless probe using said raw measurements; and communicating said statistical data to a central analysis center.

- 41. The method of claim 40 further comprising: marking each of said raw measurements with a measurement time; and marking each of said raw measurements with a measurement location.
- 42. The method of claim 40 wherein said taking said raw measurements is responsive to one or more of:
  - a predetermined distance traveled by said wireless probe;
  - a predetermined time period elapsed; and
- a predetermined distance traveled when a predetermined period of time has also elapsed.
  - 44. The method of claim 40 wherein said calculating step comprises: calculating intermediate statistical values using said raw measurements.

45. The method of claim 40 further comprising: storing said raw measurements and said statistical data in a memory local to said plurality of wireless probes.

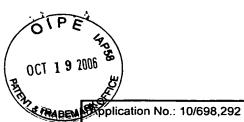
46. The method of claim 45 further comprising: deleting selected ones of said raw measurements prior to said storing.

## IX. EVIDENCE APPENDIX

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

## X. RELATED PROCEEDINGS APPENDIX

No related proceedings or copies of decisions in related proceedings are being submitted.



Attorney Docket No.: 10031298-1

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV568242423US in an envelope addressed to:

> MS APPEAL BRIEF - PATENTS **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

on	October 19, 2006  Date				
Joseph J. Perico					
$\nu$					
Joy H. Perigo  Typed or printed name of person signing Certificate					
	, , ,	(214) 855-8171			
Regi	stration Number, if applicable	Telephone Number			
Note:	Fach naner must have its own certificat	e of mailing, or this certificate must identify			
14016.	each submitted paper.	of maining, or and continuate must demany			

Return Postcards (2)

Certificate of Express Mailing (1 page) Transmittal (2 pages, 1 original & 1 copy)

Appeal Brief (26 pages)